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REMARKS

Claims 1-36 are pending in the application. Claims 1-5, 8-16, 18-22, 25-28 30, 31, 33, and 37 are rejected under 35 U.S.C. § 102(e) as being anticipated by Suzuki '196. Claims 6, 23, and 34 are rejected under 35 U.S.C. § 103(a) as being anticipated by Suzuki '196. Claims 7, 17, 24, 35, and 36 are rejected under 35 U.S.C. § 103(a) as being anticipated by Suzuki '196 in view of Gross '870. Applicant transveres each of these rejections.

Claim 1 recites a disposable absorbent article wherein a component of the absorbent article is an absorbent composite that includes an absorbent layer coated on a nonwoven substrate. The absorbent layer is further recited as including Super Absorbent Polymer (SAP) bonded together by a layer of hydratable fine fibers.

Suzuki '196 discloses a sintered porous composite sheet made from an A component layer (hydrophobic material) and a B component layer (pourous material). Suzuki '196 is particularly focused on the relative permeability of portions of the composite sheet when the A component layer and the B component layer are sintered together. As noted generally in columns 9 and 10, when the hydrophobic material (A) is sintered to the porous material (B), a composite is created with area in which the A and B layers are distinct and area in which the A and B layers are sintered together. In the areas in which the A and B layers remain distinct, the A layer retains its hydrophobicity. In the sintered areas, fluid can pass freely through the sintered material. See e.g., col. 9, lns. 45 - 52 ("This arrangement facilitates the absorption of moisture at the sintered areas, while the hydrophobic property of the first porous layer at the non-sintered areas shuts out moisture to maintain a dry sheet.") In this manner, Suzuki '196 discloses a way of making porous composite sheet using a hydrophobic material.

Although Suzuki '196 teaches including powdered particles in a multi-layerd sheet (FIG. 31), it does not teach or suggest bonding SAP together by a layer of hydratable fibers as (1) recited in Claim 1. The specification teaches storing the powdered polymer particles in the "fold loop." Col. 19, ln.. 61 - col. 20, ln. 12. The specification also teaches that the storage capacity of the 'fold loop' can be improved by narrowing the distance between adjacent crests and adding a small amount of moisture. Col. 20, lns. 4 - 12. Alternatively, Suzuki '196 discloses coating the surface of the fold with a tissue to lock the polymer in place (Col. 20,

Ins. 10-12) or storing the polymer in pockets under the A component layer (Col.18, Ins. 41-67). Collectively, the storage mechanisms of Suzuki '196 merely trap powered polymer particles in pockets or under a hydrophobic layer. Thus, Suzuki '196 does not teach or suggest the use of SAP and bonding SAP together by hydratable fibers and coated upon a nonwoven substrate in an absorbent article. Among other things, the use of SAP as claimed and disclosed by Applicant allows for improved fit and appearance, improved absorption and liquid containment properties, simpler, more efficient manufacturing process, reduction of components and material sources, and a thinner, more compact construction of absorbent articles. Accordingly, Claim 1 contains patentable subject matter.

Claim 2 depends from Claim 1. The arguments presented for Claim 1 are applicable. Additionally, Claim 2 further defines Applicant's invention by disclosing that each cuff includes a longitudinally extending absorbent composite. Although Suzuki '196 shows cuffs (43) in FIG. 41, it does not disclose cuffs that include longitudinally extending absorbent composite. Accordingly, Claim 2 contains patentable subject matter. 33, 40

Claims 3 - 5 depend from Claim 2 and further define Applicant's invention. The arguments presented for Claims 1 and 2 are applicable. Accordingly, Claims 3-5 contain patentable subject matter.

Claims 6 and 7 depend from Claim 1. The arguments presented for Claim 1 are applicable. Claim 6 and 7 further define Applicant's invention by disclosing low cross link SAP adapted to gel block upon wetting. Suzuki '196 discloses using absorbent polymers for the limited purpose of absorbing fluid. Suzuki '196 does not teach or suggest using polymers to gel block, and, in fact, teaches away from such use. As noted above, Suzuki '196 is directed to a composite material with sintered areas that are liquid permeable. Thus, an important aspect of composite taught in Suzuki '196 is the liquid permeability of the sintered regions. Any modification to the sintered areas to prevent the passage of fluid would defeat the purpose of Suzuki '196. A modification that destroys the intent, purpose, and function of reference is improper for establishing a basis for a 35 U.S.C. § 103 rejection (see e.g., In re Ratti, 270 F.2d 810, 123 U.S.P.Q. 349 (C.C.P.A. 1959)).

Additionally, Suzuki '196 concentrates the absorbent polymers in pockets. See e.g., Col. 18, Ins.. 55 - 57. As shown in FIG. 18, the polymeric absorbent (502) is located under the 'waves' and out of the sintered area. See e.g. Col. 10, Ins. 30 - 31. The reference in

Suzuki '196 to the hydrophobic wave portions (Col. 18 ln. 67) is merely a reference to the hydrophobic A-component layer of the composite sheet, not gel blocking. As a result, the absorbent polymer used in Suzuki '196 is not disclosed in a layered form capable of gel blocking to obtain a substantially impervious backsheet. As a result, Suzuki '196 does not teach or suggest using a polymeric absorbent as a gel blocking agent. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention when there is some teaching, suggestion, or motivation to do so found in the reference itself or in the knowledge generally available to one of ordinary skill in the art. In re Fine, 837 F.2d 1071, 35 U.S.P.Q. 1596 (C.A.F.C. 1988). Since the required teaching, suggestion, or motivation has not been establish in Suzuki '196 or Suzuki '196 in view of Gross '870 and the knowledge is not generally available to one of ordinary skill in the art, it is respectfully requested that rejection to Claims 6 and 7 be withdrawn.

Claim 8 depends from Claim 1. The arguments present for Claim 1 are applicable. Accordingly, Claim 8 contains patentable subject matter.

Claim 9 depends from Claim 1. Additionally, Claims 9 further details Applicant's invention by noting that the core includes a plurality of absorbent layers that are spaced such that the substrate is exposed therebetween. Suzuki '196 does not disclose such a configuration. Applicant respectfully notes that FIG 8, cited by the Examiner, does not disclose a core. Instead, FIG 8 discloses a composite sheet (100) with an A-component layer (204), a B-component layer (304), and sintered regions (404). Col. 9, lns. 32-38. Thus, FIG 8 discloses a composite sheet designed to allow liquid to pass through the sheet. FIG 33 of Suzuki '196 does disclose a core. However, FIG. 33 discloses only a single unitary core. Accordingly, Claim 9 contains patentable subject matter.

Claims 10 - 11 depend from Claim 9. The arguments presented with respect to Claim 9 are applicable. Accordingly, Claims 10-11 contain patentable subject matter.

Claim 12 depends from Claim 8. The arguments presented with respect to Claim 8 are applicable. Additionally, Claim 12 further details Applicant's invention by noting that the absorbent composite layer has a corrugated configuration. Suzuki '196 does not teach or suggest such a configuration. Suzuki '196 discloses only that the hydrophobic A-layer may be sintered in such a way so as to form a corrugated structure (FIG. 19) However, in FIG 19, its the hydrophobic layer that is corrugated, not the absorbent core. As such, Suzuki '196

does not teach the advantages achieved from a corrugated absorbent composite as disclosed in Claim 12. Accordingly, Claim 12 contains patentable subject matter.

Claim 13 depends from Claim 1. The arguments presented for Claim 1 are applicable. Additionally, Claim 13 further details Applicant's invention by noting that the absorbent layer is concentrated at a crotch region of the backsheet. Suzuki '196 does not teach concentrating hydratable fine fibers and SAP in any particular region, much less a crotch region. Thus, Suzuki '196 does not teach all the advantages disclosed by Applicant's invention in Claim 13. Accordingly, Claim 13 contains patentable subject matter.

Claim 14 depends from Claim 1. The arguments presented for Claim 1 are applicable. Additionally, Claim 14 further details Applicant's invention by noting that the absorbent composite includes one or more absorbent layers. Suzuki '196 does not teach such a configuration. As shown in FIG 33, Suzuki '196 discloses a cross section of a diaper with a single unitary core structure. Suzuki '196 does not disclose an absorbent article that takes advantage of absorbent layers as claimed by Claim 14. Accordingly, Claim 14 contains patentable subject matter.

Claim 15 depends from Claim 1. The arguments present for Claim 1 are applicable. Claim 15 further details Applicant's invention by noting that the pulp concentration is disposed between at least two layers of the sheet of absorbent layer and nonwoven substrate. As noted with respect to Claim 14, Suzuki '196 does not teach a multilayer absorbent composite. Suzuki '196 also does not disclose disposing pulp concentration between at least two layers of a sheet of absorbent layer and nonwoven substrate. Accordingly, Claim 15 contains patentable subject matter.

Claim 16 depends from Claim 1. The arguments present for Claim 1 are applicable. Accordingly, Claim 16 contains patentable subject matter.

Claim 17 depends from Claim 1. The arguments present for Claim 1 are applicable. Additionally, Claim 17 further details Applicant's invention by noting that the absorbent layer is adapted to gel block. As noted in the arguments for Claims 6 and 7, Suzuki '196 does not disclose the advantages of an absorbent article adapted to gel block upon wetting. Accordingly, Claim 17 contains patentable subject matter.

Claim 18 is an independent claim. The arguments presented with respect to Claim 1 are applicable. Suzuki '196 does not disclose the advantages of an absorbent composite that

includes SAP bonded together by hydratable fibers and coated upon a nonwoven substrate. Accordingly, Claim 18 contains patentable subject matter.

Claims 19 - 22 depend from Claim 18. The arguments presented with respect to Claim 18 are applicable. Further, the arguments presented with respect to Claims 2 and 13 are also applicable. Accordingly, Claims 19 - 22 contain patentable subject matter.

Claim 23 depends from Claim 20. The arguments presented with respect to Claim 20 are applicable. Further, the arguments presented with respect to Claims 6 and 7 are also applicable. Accordingly, Claim 23 contains patentable subject matter.

Claim 24 depends from Claim 18. The arguments presented with respect to Claim 18 are applicable. Additionally, Claim 24 further details Applicant's invention by more particularly pointing out the concentration of SAP and the basis weight of the nonwoven substrate. Suzuki '196 discloses only generally the use of an absorbent polymer (see arguments with respect to Claim 1). Suzuki '196 does not particularly point out an advantageous concentration of SAP and basis weigh of nonwoven substrate. Further, because Suzuki '196 does not teach the advantages of providing SAP bonded by hydratable fibers, and instead teaches trapping absorbent polymer beneath a hydrophobic layer (FIG. 18), there is no motivation for such a change. See In re Fine, 837 F.2d 1071, 35 U.S.P.Q. 1596 (C.A.F.C. 1988)(obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention when there is some teaching, suggestion, or motivation to do so found in the reference itself or in the knowledge generally available to one of ordinary skill in the art.) Considering Suzuki '196, one skilled in the art would only know to vary the amount of absorbent polymer and the size of the pocket. Accordingly, Claim 24 contains patentable subject matter.

Claim 25 depends from Claim 18. The arguments with respect to Claim 18 are applicable. Further, the arguments with respect to 15 are also applicable. Accordingly, Claim 25 contains patentable subject matter.

Claim 26 depends from claim 25. The arguments with respect to Claim 25 are applicable. Accordingly, Claim 26 contains patentable subject matter.

Claim 27 depends from Claim 18. The arguments with respect to Claim 18 are applicable. Further, Claim 27 notes the absorbent composite layer has a corrugated configuration. As noted in arguments with respect to Claim 12, Suzuki '196 does not

disclose a corrugated absorbent composite layer. Accordingly, Claim 27 contains patentable subject matter.

Claim 28 depends from Claim 18. The arguments with respect to Claim 18 are applicable. Further, the arguments with respect to the Claim 15 is also applicable. Accordingly, Claim 28 contains patentable subject matter.

Claim 29 depends from Claim 18. The arguments with respect to Claim 18 are applicable. Additionally, the arguments with respect to Claim 12. Accordingly, Claim 29 contains patentable subject matter.

Claim 30 is an independent claim. The arguments presented with respect to Claim 1 are applicable. Suzuki '196 does not disclose the advantages of an absorbent composite that includes SAP bonded together by hydratable fibers and coated upon a nonwoven substrate.

Claims 31 and 33 depend from Claim 30. The arguments with respect to Claim 30 are applicable. Accordingly, Claims 31 and 33 contain patentable subject matter.

Claims 34 - 36 depend from Claim 33. Further, the arguments present with respect to Claim 24 are applicable. Accordingly, Claims 34-36 contain patentable subject matter.

Claim 37 depends from Claim 30. Further, the arguments presented with respect to Claim 14 are applicable. Accordingly, Claim 37 contains patentable subject matter.

In view of the foregoing, entry of amendment and allowance of Claims 1-38 are respectfully requested.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "CLAIMS; Version With Markings to Show Changes Made."

Please charge any shortage or credit any overpayment of fees to the standing account of Fulbright & Jaworski, Account No. 06-2375 under Order No. HO-P01881US1. In the event that a petition for an extension of time is required to be submitted herewith, and in the event that a separate petition does not accompany this response, the undersigned hereby petitions under 37 C.F.R. 1.13 (a) for an extension of time for as many months as are required to render this submission timely. Any fee due is authorized above.

The undersigned is available for telephone consultation at any time during normal business hours.

Date: January 18, 2002

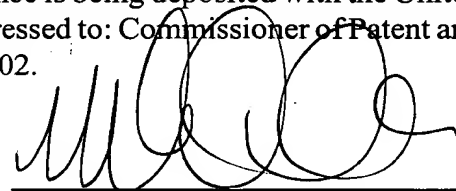
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CERTIFICATE UNDER 37 C.F.R. § 1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patent and Trademarks, Washington, D.C. 20231, on January 18, 2002.



Michael S. McCoy
Registration No. 46,913

CLAIMS

Version With Markings to Show Changes Made

What is claimed is:

1 1. A disposable absorbent article comprising:
2 a topsheet;
3 a backsheet; and
4 an absorbent core disposed therebetween;
5 wherein at least one of said backsheet, topsheet, and absorbent core is constructed of an
6 absorbent composite including
7 an absorbent layer of hydratable fine fibers in the form of microfibril obtained
8 from cellulose or a derivative thereof, and super absorbent polymer (SAP) particles bonded
9 together by said hydratable fibers, and
10 a nonwoven substrate supporting said absorbent layer, said absorbent layer being
11 coated thereupon.

1 2. The article of claim 1, further comprising a pair of longitudinally-extending,
2 upstanding cuffs spaced laterally from said core, each said cuff including a folded portion of said
3 topsheet and a longitudinally-extending absorbent composite secured within said folded portion,
4 said longitudinally-extending absorbent composite including
5 an absorbent layer of hydratable fine fibers in the form of microfibril obtained from
6 cellulose or a derivative thereof, and super absorbent polymer (SAP) particles bonded together
7 by said hydratable fibers, and
8 a nonwoven substrate supporting said absorbent layer, said absorbent layer being coated
9 thereupon.

1 3. The article of claim 2, wherein said core includes said first absorbent composite.

1 4. The article of claim 3, wherein said first absorbent composite and said
2 longitudinally extending absorbent composites of said cuffs are sections of one continuous
3 absorbent composite structure positioned about a crotch region of said article.

1 C2 5. The article of claim 2, wherein said nonwoven substrate is a section of said
2 topsheet.

3
4 6. The article of claim 1, wherein said backsheet is formed from said absorbent
5 composite, said absorbent layer including a low cross link SAP adapted to gel block upon
6 wetting such that said backsheet is substantially impervious when wet and said backsheet is
7 breathable when dry.

1 7. The absorbent article of claim 6, wherein said SAP are water-swellaable particles
2 included in a concentration in the range of about 50g/m² to about 500 g/m².

1 8. The absorbent article of claim 1, wherein said absorbent core includes a
2 prefabricated sheet of said absorbent composite.

1 9. The absorbent article of claim 8, wherein said absorbent composite of said core
2 includes a plurality of said absorbent layers, said layers being spaced apart from one another such
3 that non-coated surface sections of said substrate are exposed therebetween.

1 10. The absorbent article of claim 9, wherein said non-coated surface sections form
2 wicking zones between said absorbent layers.

1 11. The absorbent article of claim 8, wherein said absorbent layers are laterally
2 spaced, elongated segments.

1 12. The absorbent article of claim 8, wherein said absorbent composite layer has a
2 corrugated configuration characterized by a plurality of pleats at which distinct adjacent sections
3 of said absorbent composite are mutually adhered.

1 13. The absorbent article of claim 1, wherein said absorbent composite forms said
2 backsheet and said core, said backsheet having a section providing said nonwoven substrate and
3 said absorbent layer being concentrated at a crotch region of said backsheet to form said

1 absorbent core.

1 14. The absorbent article of claim 1, wherein said core includes said absorbent
2 composite, said absorbent composite further including one or more of said absorbent layers
3 disposed over said nonwoven substrate.

1 15. The absorbent article of claim 1, wherein said absorbent composite further
2 includes a concentration of pulp material, said absorbent layer and said nonwoven substrate
3 forming a sheet disposed about said pulp concentration such that said pulp concentration is
4 disposed between at least two layers of said sheet of absorbent layer and nonwoven substrate.

1 16. The absorbent article of claim 1, wherein said absorbent composite forms at least
2 a portion of said topsheet and said absorbent core, said topsheet having a section providing said
3 nonwoven substrate and said absorbent layer forming said core.

1 17. The absorbent article of claim 1, wherein said absorbent layer includes low-
2 crosslink, low gel strength SAP having free swell capacities of over 40 g/g and such that said
3 absorbent layer is adapted to gel block upon wetting so as to be substantially impervious but is
4 breathable when dry.

1 18. A disposable absorbent article comprising:
2 a topsheet;
3 a backsheet;
4 an absorbent composite including
5 an absorbent layer of hydratable fine fibers in the form of microfibril obtained
6 from cellulose or a derivative thereof, and absorbent polymer (SAP) particles bonded together
7 by said hydratable fibers, and
8 a nonwoven substrate supporting said absorbent layer, said absorbent layer being
9 coated thereupon; and
10 wherein said absorbent layer is disposed between the topsheet and backsheet, and
11 generally centrally at a location identified as a crotch region, said absorbent layer providing an

1 absorbent core for absorbing bodily exudates received in said crotch region.

1 19. The article of claim 18, wherein said absorbent layer is supported underneath a
2 section of said topsheet, such that said section of said topsheet provides said nonwoven substrate
3 of said absorbent composite.

1 20. The article of claim 18, further comprising a pair of longitudinally-extending,
2 upstanding cuffs spaced laterally from said absorbent core, each said cuff including a folded
3 portion of said topsheet and a longitudinally-extending absorbent composite secured within said
4 folded portion, said longitudinally-extending absorbent composite including
5 an absorbent layer of hydratable fine fibers in the form of microfibril obtained from
6 cellulose or a derivative thereof, and super absorbent polymer (SAP) particles bonded together
7 by said hydratable fibers, and
8 a nonwoven substrate supporting said absorbent layer, said absorbent layer being coated
9 thereupon.

10
11 21. The article of claim 18, wherein said absorbent composite located at said crotch
12 region and said longitudinally extending absorbent composites of said cuffs are sections of one
13 continuous absorbent composite structure positioned about the crotch region.

1 22. The article of claim 18, wherein said absorbent layer is supported on said
2 backsheet, such that a section of said backsheet provides said nonwoven substrate of said
3 absorbent composite.

1 23. The article of claim 20, wherein said absorbent layer includes a low cross link
2 SAP adapted to gel block upon wetting such that said backsheet is substantially impervious when
3 wet and said backsheet is breathable when dry.

1 24. The absorbent article of claim 18, wherein said SAP are water-swellaable bodies
2 included in a concentration of about 20 gsm and said nonwoven substrate is an SMS having a
3 basis weight in the range of about 10 gsm to 60 gsm.

1 25. The absorbent article of claim 18, wherein said absorbent composite of said core
2 includes a plurality of said absorbent layers, said layers being spaced apart from one another such
3 that non-coated surface sections of said substrate are exposed therebetween, said non-coated
4 surface sections forming wicking zones between said absorbent layers.

1 26. The absorbent article of claim 25, wherein said absorbent layers are laterally
2 spaced, elongated segments.

1 27. The absorbent article of claim 18, wherein said absorbent composite layer has a
2 corrugated configuration characterized by a plurality of pleats at which distinct adjacent sections
3 of said absorbent composite are mutually adhered.
4

5 28. The absorbent article of claim 18, wherein said absorbent composite further
6 includes a concentration of pulp material, said absorbent layer and said nonwoven substrate
7 forming a sheet disposed about said pulp concentration such that said pulp concentration is
8 disposed between at least two layers of said sheet of absorbent layer and nonwoven substrate.

1 29. The absorbent article of claim 18, wherein a plurality of sections of said topsheet
2 is spaced from said [top]backsheet and alternating sections of said topsheet are secured to said
3 backsheet, each said spaced topsheet section including one or more of said absorbent layers such
4 that said topsheet forms said nonwoven substrate of said absorbent composite.

1 30. In a disposable absorbent having an absorbent core disposed between a topsheet
2 and a backsheet, a prefabricated absorbent composite comprising:

3 an absorbent layer of hydratable fine fibers in the form of microfibril obtained from
4 cellulose or a derivative thereof, and absorbent polymer (SAP) particles bonded together by said
5 hydratable fibers, and

6 a nonwoven substrate supporting said absorbent layer, said absorbent layer being coated
7 thereupon;

8 wherein said absorbent layer is disposed between the topsheet and backsheet, and
9 generally centrally in the article at a location identified as a crotch region, said absorbent layer

1 providing an absorbent core for absorbing bodily exudates received by the crotch region.

1 31. ^{Amdt} The absorbent composite of claim [31]30, wherein said absorbent layer is
2 supported underneath a section of the topsheet, such that said section of topsheet provides said
3 nonwoven substrate of said absorbent composite.

1 32. The absorbent composite of claim 30, wherein the article includes a pair of
2 longitudinally-extending, upstanding cuffs spaced laterally from said absorbent core, each cuff
3 having two sheet layers, and wherein said absorbent composite includes two longitudinally-
4 extending composite sections extending upwardly from the crotch region into the cuffs and
5 between the cuff layers, said absorbent composite forming an absorbent structure about the
6 crotch region.

1 33. The absorbent composite of claim 30, wherein said absorbent layer is supported
2 on a section of the backsheet, such that said backsheet section provides said nonwoven substrate
3 of said absorbent composite.

1 34. The absorbent composite of claim 33, wherein said absorbent layer includes a low
2 cross link SAP adapted to gel block upon wetting such that said backsheet section is substantially
3 impervious when wet and said backsheet section is breathable when dry.

1 35. The absorbent composite of claim 34, wherein said low cross-link SAP is low-gel
2 strength SAP characterized by a free swell capacity greater than about 40 g/g.

1 36. The absorbent composite of claim 30, wherein said SAP are water-swella-
2 bles included in a concentration of about 50 gsm to 500 gsm.

1 37. The absorbent composite of claim 30, wherein said absorbent composite of said
2 core includes a plurality of said absorbent layers, said layers being spaced apart from one another
3 such that non-coated surface sections of said substrate are exposed therebetween, said non-coated
4 surface sections forming wicking zones between said absorbent layers.

1 38. The absorbent composite of claim 30, further comprising a coating of mineral oil
2 over the SAP particles of the absorbent layer, said coating being adapted to retard the initial
3 receipt of liquid by the SAP in the absorbent layer.
4